Issue 72 February 11, 2022

Fasciculus Muscorum I: Nine Mosses New to New Mexico

Kelly W. Allred¹, Russ Kleinman², and John C. Brinda³

The present authors and colleagues have documented numerous additions to the bryophyte flora of New Mexico (Allred 1998, 2011, 2012; Allred & Kleinman 2021; Allred et al. 1998, 2016; Blisard & Kleinman 2012; Brooks & Brinda 2020; Darigo & Allred 2001; Kleinman 2012; Kleinman et al. 2011, 2020, 2021; Romig & Allred 2013). We continue that tradition herein, accompanied by the establishment of a bibliographic series focused on the bryophytes of New Mexico: *Fasciculus Muscorum*. Even though bryophytes known from the state now approach or exceed 400 in number, we anticipate further additions, as well as clarifications of nomenclature, distribution, or taxonomy, which will be reported in this series.

Additions to the New Mexico Bryoflora

Anomobryum concinnatum (Spruce) Lindberg (Bryaceae): San Miguel County: San Miguel National Forest, Pecos Canyon, across hwy 63 from Mora Campground, along Pecos River, mixed conifer forest, on rock at bottom of volcanic rock cliff, 7929 ft, 30 July 2019, with Karen Blisard, Russ Kleinman 2019-7-30-2 (MO, SNM); Santa Fe National Forest, Pecos Wilderness, north of El Cielo Mountain in Cascade Canyon, mixed conifer forest, on seepy rock, N35.749201° W105.448239°, 2496 m, 18 Aug 2019, John C. Brinda 13923 (MO). ◆Additional collection at CNABH not examined by us: Santa Fe County: Water Creek Canyon, May 1926, C.R. Orcutt s.n. (FH). ◆Photos by 1-John Brinda (Brinda 13923); 2-Russ Kleinman (Kleinman 2019-30-2).



¹ Professor Emeritus, New Mexico State University Herbarium (NMC/NMCR), Las Cruces; kla49@outlook.com

2

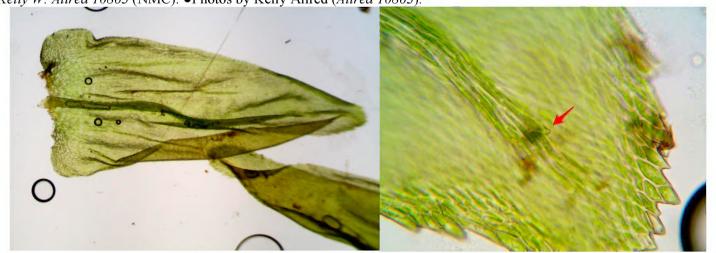
² Dale Zimmerman Herbarium (SNM), Department of Natural Sciences, Western New Mexico University, Silver City, sparks@zianet.com

³ Missouri Botanical Garden (MO), St. Louis; john.brinda@mobot.org

⁴ We happily acknowledge our adaptation of Rupert Barneby's novel title for his series on the genus *Astragalus*, Pugillus Astragalorum, "a fistful of *Astragalus*." Our title might be rendered "a little bundle of mosses."

Brachythecium frigidum (Müller Hal.) Bescherelle (Brachytheciaceae): <u>Catron County</u>: Gila National Forest, Iron Creek, mixed conifer forest, N33°22.629' W108°33.429', growing on wet ground along creek, 7830 ft, 7 June 2000, *Kelly W. Allred 7770* (NMC). <u>Lincoln County</u>: Lincoln County: White Mts, Lincoln National Forest, South Fork Rio Bonito, N33°26.727' W105°45.424', 7336 ft, growing on wet rocks along stream, with Jesse Allred, 22 May 2003, *Kelly W. Allred 8631*, 8632 (NMC). ●Photos by Kelly Allred (1-*Allred 7770*; 2-*Allred 8631*).

Eurhynchiastrum pulchellum (Hedwig) Ignatov & Huttunen var. *barnesii* (Renauld & Cardot) Ignatov (Brachytheciaceae): Rio Arriba County: Carson National Forest, little side dirt road off of hwy 64, about 900 feet up road (north), subalpine coniferous forest, N36.71061° W106.18355°, 9146 ft, 15 June 2017, moist detritus of rotting log, with Russ Kleinman, *Kelly W. Allred 10863* (NMC). •Photos by Kelly Allred (*Allred 10863*).



Haplohymenium triste (Cesati) Kindberg (Anomodontaceae): San Miguel County: Santa Fe Mountains, Santa Fe National Forest, hwy 263 west of Las Vegas, El Porvenir Canyon, on large boulder under overhang in mixed conifer forest along trail to Hermit Peak, just past first river crossing, shade, UTM NAD 83 13S 0461859 3952322, 7552 ft, 18 June 2021, Russ Kleinman 2021-6-18-30 (SNM); Mixed conifer forest, Along Beaver Creek and El Porvenir Trail #247 in Porvenir Canyon below the wilderness boundary, on igneous rock, N35.71866° W105.424376°, 2315 m, 18 April 2019, John C. Brinda 13279 (MO). ◆Additional collection at CNABH not examined by us: Catron County: Mogollon Mts, Willow Creek, 4 Aug 2004, R.D. Worthington32626 (COLO). ◆Photos by 1-John Brinda (Brinda 13279); 2-Russ Kleinman (Kleinman2021-6-18-30)



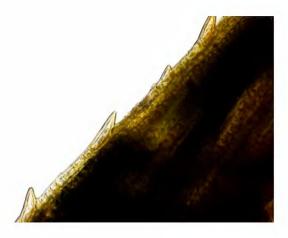
Herpetineuron toccoae (Sullivant & Lesquereux) Cardot (Thuidiaceae): <u>Sierra County</u>: Black Range, along Percha Creek, about 1-1.5 miles west of junction with For. Serv. Road 157, mesic canyon, on igneous substrate, 6500-7000 ft, 8 July 1995, *R.D. Worthington 25033 p.p.* (COLO). ●Photos by Russ Kleinman (*Worthington 25033*).



Polytrichum commune Hedwig (Polytrichaceae): <u>Sandoval County</u>: Valles Caldera, Alamo Canyon near Sulphur Springs, large wetland in spruce-pine canyon bottom, in fen with slowly flowing water, N35.912771° W106.577496°, 8745 ft, 3 July 2019, with Karen Blisard, *Russ Kleinman 2019-7-3-1* (SNM); Valles Caldera National Preserve, Alamo Canyon, about 2 km northeast of Sulphur Springs, on wet soil of fen, N35.917318°, W106.596481°, 2605 m, 9 Aug 2019, *John C. Brinda 13648* (MO). ●Photos by Russ Kleinman (*Kleinman 2019-7-3-1*).







Rosulabryum flaccidum (Bridel) J.R. Spence (Bryaceae): <u>Catron County</u>: Apache National Forest, Blue Range Wilderness, east of the WS Mountain Trail #43, along an unnamed tributary of Pueblo Creek, about 1 km south of the Pueblo Park Trailhead, pine-juniper-oak woodland, on boulder, N33.582538° W108.962441°, 1869 m, 10 July 2021, *John C. Brinda 13519* (MO). ◆Photos by John Brinda (*Brinda 13519*).



Scorpidium cossonii (Schimper) Hedenäs (Amblystegiaceae): Rio Arriba County: Tusas Mts, Carson National Forest, Upper Canjilon Lakes region, along Continental Divide Trail about 2 miles north of Upper Canjilon Lake and the end of For. Rd. 129, at edge of fen/wetland bordering spruce-fir forest, near Canjilon Creek, N36.581176° W106.326919°, 10423 ft, on ground, 14 July 2021, with Russ Kleinman, Kelly W. Allred 11028A (NMC); Carson Nat. For., CD Trail north of Canjilon Lakes in spruce-fir forest, in widening fen about 2 miles from trailhead, UTM NAD83 13S 0381213 4049296, 10329 ft, 16 June 2021, with K. Blisard, S. Anderson, & B. Ewing, Russ Kleinman 2021-6-16-15 (SNM). ◆Photos by Russ Kleinman (Kleinman 2021-6-16-15).



Sphagnum capillifolium (Ehrhart) Hedwig (Sphagnaceae): Rio Arriba County: Tusas Mts, Carson National Forest, Upper Canjilon Lakes region, along Continental Divide Trail about 2 miles north of Upper Canjilon Lake and the end of For. Rd. 129, in fen/wetland clearing in the spruce-fir forest, along Canjilon Creek, N36.581556° W106.32775°, 10396 ft, on ground in mats and small tussocks near spring, 14 July 2021, with Russ Kleinman, Kelly W. Allred 11026 (NMC); Carson National Forest, Canjilon Ranger District, along the Continental Divide Trail and Canjilon Creek above Canjilon Lakes, spruce-fir forest, on wet soil, N36.581508° W106.32778°, 3147 m, 10 Aug 2019, John C. Brinda 13660 (MO); Carson National Forest, Pecos Wilderness, along the Trampas Lakes Trail #31, spruce-fir forest, on soil near spring, N36.011905° W105.63021°, 3182 m, 16 Aug 2019, John C. Brinda 13835, 13836 (MO); Carson National Forest, Pecos Wilderness, near Trampas Lake at the end of the Trampas Lakes Trail, spruce-fir forest, on soil along lake shore, N35.993369° W105.63496°, 3483 m, 16 Aug 2019, John C. Brinda 13867 (MO); Carson Nat. For., CD Trail about 2 miles north of Canjilon Lakes in in broad rich fen surrounded by spruce-fir forest, on wet soil, not forming hummocks and relatively inconspicuous on banks of slowly moving water in partial shade, UTM NAD83 13S 0381213 4049296, 10329 ft, 16 June 2021, with K. Blisard, S. Anderson, & B. Ewing, Russ Kleinman 2021-6-16-1 (SNM). ◆Photos by 1-Russ Kleinman (Kleinman 2021-6-16-1); 2-John Brinda (Brinda 13660).



Acknowledgements

We are indebted to the curators and staff of herbaria who make their collections available online (CNABH portal). We thank Erin Tripp and Dina Clark of COLO for the loan of *Herpetineuron toccoae* for verification. Many thanks to Zachary Rogers of NMC/NMCR for making available their collections at numerous times and hours.

Literature Cited

- Allred, K.W. 1998. Second collection of a little moss, *Fissidens littlei* (Williams) Grout, rediscovered from a little sinkhole in New Mexico. Evansia 15(4): 148-149.
- Allred, K.W. 2011. Report on the 2010 SO BE FREE Foray in southern New Mexico, with eight new moss records for the state. Evansia 28(3): 74-77.
- Allred, K.W. 2011. Plant distribution reports. The New Mexico Botanist 54: 10.
- Allred, K.W. 2011. Plant distribution reports. The New Mexico Botanist 55: 11.
- Allred, K.W. 2012. Plant distribution reports. The New Mexico Botanist 56: 2-3.
- Allred, K.W. 2012. Plant distribution reports. The New Mexico Botanist 57: 4.
- Allred, K.W., C. Darigo, & R.D. Worthington. 1998. Additions to the moss flora of New Mexico. Evansia 15(3): 95-98.
- Allred, K.W. & R. Kleinman. 2021. Paraleucobryum ((Bryophyta: Bryopsida: Dicranaceae) in New Mexico. The New Mexico Botanist 70: 1-12.
- Allred, K.W., K.B. Romig, R. Kleinman, K.S. Blisard. 2016. Additions to the bryophyte flora of New Mexico. Evansia 33(1):1-4.
- Blisard, K. & R. Kleinman. 2012. Plant distribution reports. The New Mexico Botanist 57:3.
- Brooks, J. & J. Brinda. 2020. A preliminary list of the mosses of the Animas Mountains, the Old Gray Ranch, Hidalgo County, New Mexico. The New Mexico Botanist 66: 1-6.
- CNABH Portal. 2021. http://ibryophyteportal.org/portal/index.php. Accessed on October 15.
- Darigo, C.E. & K.W. Allred. 2001. Mosses of New Mexico County Checklist. Evansia 18(1): 1-18.
- Kleinman, R. 2012. Plant distribution reports. The New Mexico Botanist 56:1.
- Kleinman, R., K. Blissard, & K. Allred. 2011. *Brothera leana* (Sull.) Müll. Hal. (Dicranaceae) in New Mexico: A significant range extension for this acrocarpous moss in North America. Evansia 28(3): 69-71.
- Kleinman, R., K.S. Blisard, K.W. Allred, & R. West. 2020. A bryophyte inventory of Carlsbad Caverns National Park. Evansia 37(2): 1-11.
- Kleinman, R., K.S. Blisard, K.W. Allred, & K. Roming, 2021. Bryophytes of El Malpais National Monument. Evansia 38(3): 116-129.
- Romig, K.B. & K.W. Allred. 2013. Mosses new to New Mexico. Evansia 30(3):105-109.